

Based on your answers, you may be at risk for Hereditary Breast and Ovarian cancer (HBOC).

What is HBOC?

Hereditary breast and ovarian cancer (HBOC) is an inherited condition that is associated with an increased risk of the following cancers:

- Breast (male and female)
- Ovarian
- Fallopian tubes
- Peritoneum
- Prostate
- Pancreas
- Melanoma (associated with certain gene variants or mutations)

HBOC affects everyone, regardless of gender. It is caused by changes (pathogenic variants) in either the *BRCA1* or *BRCA2* gene. People who have a first-degree relative (mother, father, sibling, child) with a *BRCA* pathogenic variant have a 50% chance of also having the variant. Genetic testing can help clarify if a person in a family has inherited the gene change and as such, find out which relatives have an increased chance of developing cancer.

Finding out that someone is at risk for HBOC can lead to earlier diagnosis or prevention of cancer - and can save lives.

What do you do if you may be at risk for HBOC?

People with a significant personal or family history of HBOC-related cancers should be referred for genetic counseling to discuss their risk. It is recommended that you take the following steps:

- talk to your health care provider about the results of this risk assessment
- look for genetic counseling from a qualified professional

Cancer genetic counselors are professionals who have specialized education in genetics and counseling to provide information on your risk of developing cancer. Genetic counselors can work with you and your doctor to understand genetic information and help you make

informed decisions. They can also provide emotional support as you make these decisions.

Genetic counseling is a process that helps identify a person's risk of HBOC. Genetic counseling does not always lead to genetic testing and a patient can always choose not to undergo genetic testing.

A genetic counseling session may include:

- Gathering of individual and family health history
- Assessment of cancer risk
- Genetic counseling before and after any recommended tests
- Informed consent for all recommended procedures
- Guidance on cancer prevention measures, in case of positive test results
- Possible screening of family members who may carry the same mutation

To find a Michigan genetic counselor closest to you, please visit <https://migrc.org/providers/michigan-cancer-genetics-alliance/mcga-directory-of-cancer-genetic-services-providers/>

Resources

For more information on HBOC, please consider the following resources:

- www.Michigan.gov/hereditarycancer
- <https://www.cancer.net/cancer-types/hereditary-breast-and-ovarian-cancer>
- <https://www.cdc.gov/cancer/knowledge/provider-education/genetics/hboc-syndrome.htm>
- <https://www.ncbi.nlm.nih.gov/books/NBK1247/>